pr.21631 Buyan-M

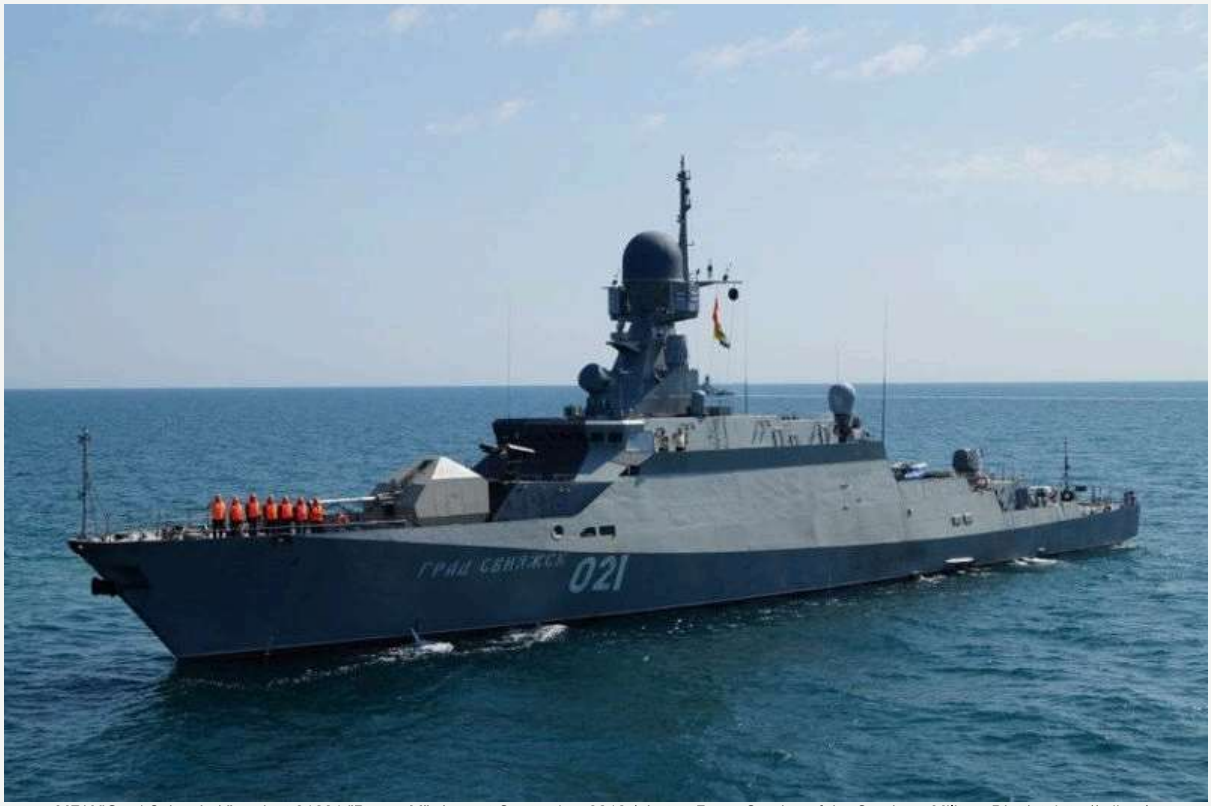
DATA FOR 2016 (standard replenishment)
project 21631 "Buyan-M "
"Grad Sviyazhsk"
"Uglich"
"Velikiy Ustyug"
"Zeleny Dol"
"Serpukhov"
"Vyshny Volochok"
"Orekhovo-Zuyevo"
"Ingushetia"
"Gaivoron"
★★★

Small river-sea missile ship / corvette. Intended to arm the Caspian Flotilla and possibly the Black Sea Fleet. The project was developed by the Zelenodolsk Design Bureau, chief designer Kushnir Ya.E., scientific and technical support - 1 Central Research Institute of the Ministry of Defense of Russia. The decision to build a series of ships of the project was made in August 2002 as part of the shipbuilding program for the Caspian Flotilla. On May 17, 2010, the Zelenodolsk Shipyard won the tender for the construction of a series of small missile ships and on May 26, 2010, the Russian Ministry of Defense and the Gorky Plant signed a contract for the construction of a series of 5 corvettes. In the summer of 2010, information appeared about the armament of the Black Sea Fleet with ships of the series. The lead ship of the series, Grad Sviyazhsk, was laid down on 27 August 2010 at the A.M. Gorky Shipyard (Zelenodolsk). The second ship of the series, Uglich, was laid down there on 25 July 2011. A total of 5 ships are planned to be built for the Caspian Flotilla (data from early 2010 or earlier).

In December 2011, it was announced in the media that a total of 8-10 ships of the project would be built for the Russian Navy. On 28 January 2013, the Russian Ministry of Defence and the Zelenodolsk Shipyard signed a contract for three Project 21631 small missile ships (with an option for two more ships) to be delivered to the Black Sea Fleet of the Russian Navy. The lead ship of the series for the Black Sea Fleet, Vyshny Volochok, was laid down on 29 August 2013 (source).

The lead ship of Project 21631, Grad Sviyazhsk, was launched on March 9, 2013. The launch of the second ship, Uglich, is scheduled for the end of March 2013. After completing mooring trials at the end of the summer, both ships will move to the main base of the Caspian Flotilla, Astrakhan, where they will begin factory sea trials and then state trials. Acceptance of both ships by the Russian Navy is scheduled for the end of 2013 (source). On June 17, 2013, the lead small missile ship of the project, Grad Sviyazhsk, began its journey from Zelenodolsk to the Caspian Sea. By the end of 2013, the ship had passed all stages of sea trials and state trials in the Caspian Sea and will join the ship association (source).

In the second ten days of December 2013, the lead ship of the project, Grad Sviyazhsk, and the first serial ship, Uglich, successfully completed all stages of state testing with four missile launches and will be officially accepted into the Caspian Flotilla of the Russian Navy in 2014.



MRK "Grad Sviyazhsk" project 21631 "Buyan-M", August-September 2013 (photo - Press Service of the Southern Military District, http://mil.ru).

Author: DIMMI Created: 01.09.2010 19:21:52 Comments: 16 READ THE FULL ARTICLE

Complex P-35 - SS-N-3B SHADDOCK

DATA AS OF 2016 (standard replenishment)
P-35 complex, 4K44 missile - SS-N-3B SHADDOCK
Progress complex, 3M44 missile - SS-N-3B SHADDOCK
★★★

Cruise missile for arming naval ships. Development of the missile was started by OKB-52 (now NPO Mashinostroyeniya, Reutov) according to the Resolution of the USSR Council of Ministers No. 1149-592 of August 17, 1956. The missile was created as an analogue of the P-6 missile for arming surface ships.

Tests. The first launch of the missile took place on October 21, 1959, probably at the Kapustin Yar test site. Field tests of the missile without radio equipment were conducted until March 1960. Tests of the P-35 from the SME-142 launcher on the experimental vessel OS-15 (dry cargo ship "Ilet") were conducted in the Caspian Sea from July 27, 1960. Continuation of tests on the OS-15 began after the modification of the APLI-1 missile control system in the 4th quarter of 1962. During the tests, one of the missiles with an inert warhead, after a direct hit on the target (the unfinished leader "Kyiv"), opened the deck by 50 m in length, the rocket engine pierced the bottom of the leader.

The first ship armed with a missile system with P-35 missiles - the missile cruiser (destroyer at laying) project 58 "Grozny" was launched on March 26, 1961 and entered service on December 30, 1962.

In some sources, in connection with the "Progress" complex, the name of the complex is mentioned as P-10 - not identified.

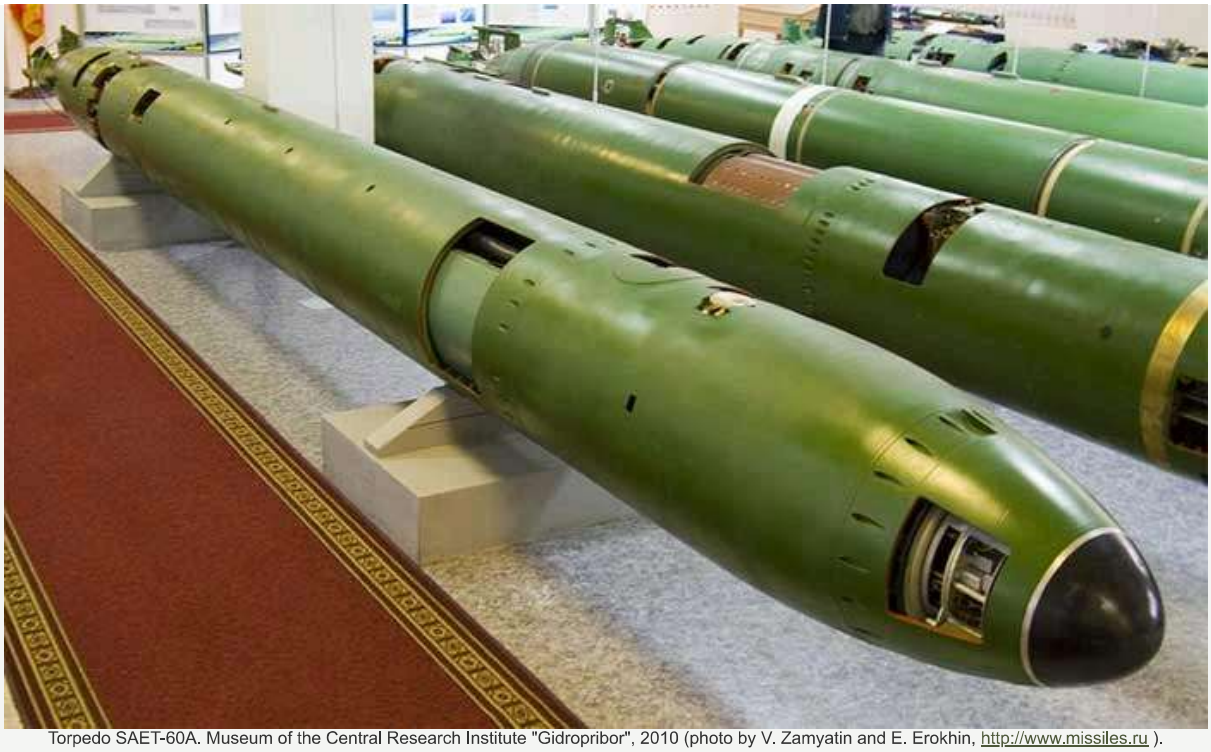
Launch of the P-35 missile from the Project 58 missile cruiser (http://forums.airbase.ru).

Author: DIMMI Created: 30.08.2010 16:41:00 Comments: 3 READ THE FULL ARTICLE

SAET-60 / SAET-60M

DATA AS OF 2016 (standard replenishment)
SAET-60 / DEST / product 228
SAET-60M / product 228
SAET-60A / DEST-2 / product 228
SAET-60ME / product 228
★★★

Anti-ship homing acoustic electric torpedo / long-range electric homing torpedo (DEST). The torpedo was developed by the Special Design Bureau of the Dvigatel plant jointly with the Research Institute-400 (Central Research Institute Gidropribor), chief designer - P.V. Matveyev. The development was carried out at least since 1957, the torpedo was accepted into service in February 1960. The SAET-60M modification was accepted into service in 1969. Serial production was carried out at the Dagdizel plant (Kaspiysk, Dagestan).



Torpedo SAET-60A. Museum of the Central Research Institute "Gidropribor", 2010 (photo by V. Zamyatin and E. Erokhin, http://www.missiles.ru).

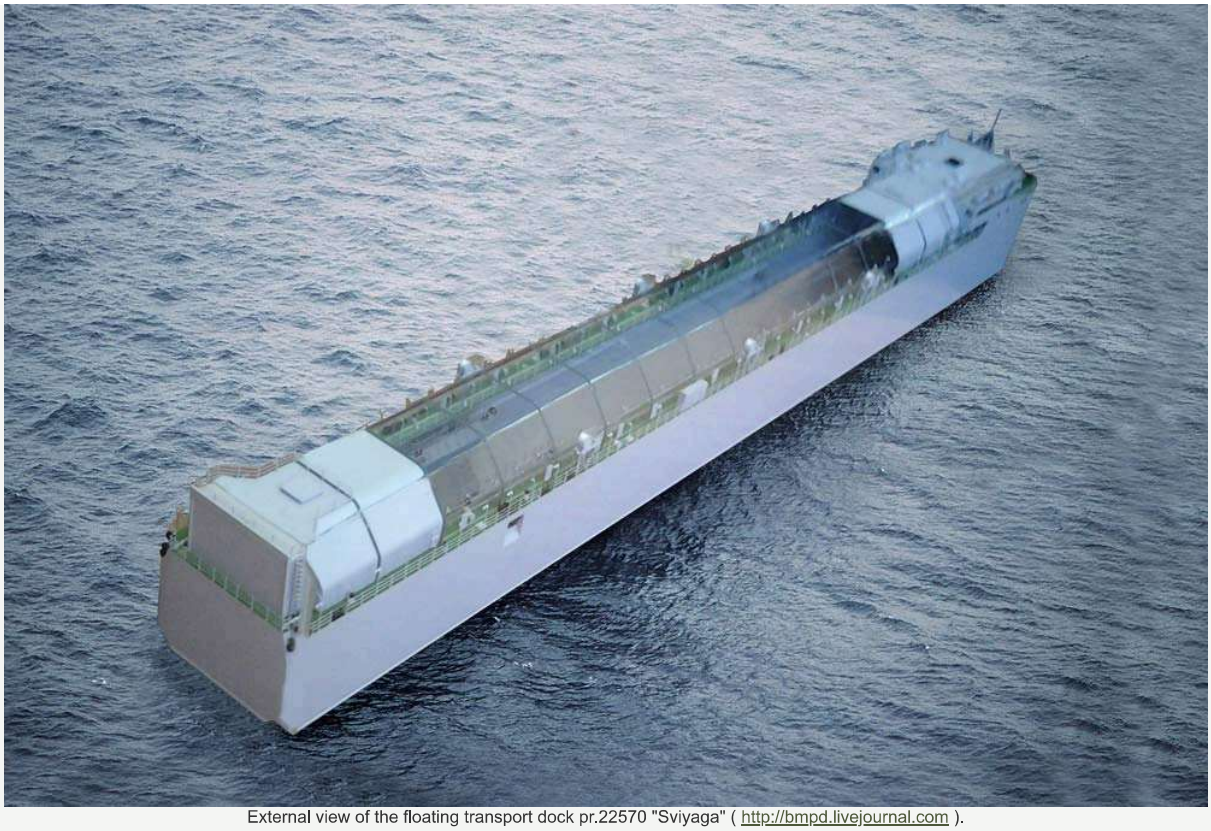
Author: DIMMI Created: 15.02.2011 23:22:21 Comments: 9 READ THE FULL ARTICLE

pr.22570 Apartment

DATA FOR 2015 (standard replenishment)
pr.22570 "Apartment"
"Sviyaga"
★★★

A special-purpose floating transport dock. The project was developed by the Almaz Central Marine Design Bureau (St. Petersburg), chief designer is Aleksandr Konstantinovich Levoshkin. The dock is being built at the Zelenodolsk Gorky Shipyard. The construction contract was signed in the spring of 2012. The customer is the Main Directorate of Marine Engineering of the Ministry of Defense of Russia. The dock was laid down on November 30, 2012. At the time of laying, it was planned to put the dock into operation in 2015. On September 1, 2015, the Sviyaga dock began its journey from Zelenodolsk to Severodvinsk for testing. On December 11, 2015, the Sviyaga dock was accepted by the Russian Navy. It is based in Severovinsk (source). On December 17, 2015, the Navy Flag was raised on the floating dock (source).

The purpose of the dock is a floating transport dock - a special-purpose vessel designed to ensure the transportation of ships and vessels, as well as to ensure their dock inspections and repairs by means of a ship repair enterprise. Based on the fact that the customer of the dock is the GUGI of the Ministry of Defense of Russia, and also taking into account the appearance (the possibility of operation with a closed payload), there is an assumption that the floating dock is designed for the transportation and servicing of nuclear deep-water stations (ADS) and other deep-water equipment. At the keel-laying ceremony, the head of GUGI, Hero of Russia, Vice-Admiral Alexey Burilichev, said that "such a floating dock ... is designed for the repair and servicing of ships of the Northern Fleet. The floating dock will ensure the transportation of ships and vessels along inland waterways from north to south" (source).



External view of the floating transport dock pr.22570 "Sviyaga" (http://bmpd.livejournal.com).

Author: DIMMI Created: 12.07.2013 16:00:15 Comments: 5 READ THE FULL ARTICLE

BrahMos-II / BrahMos-II (project)

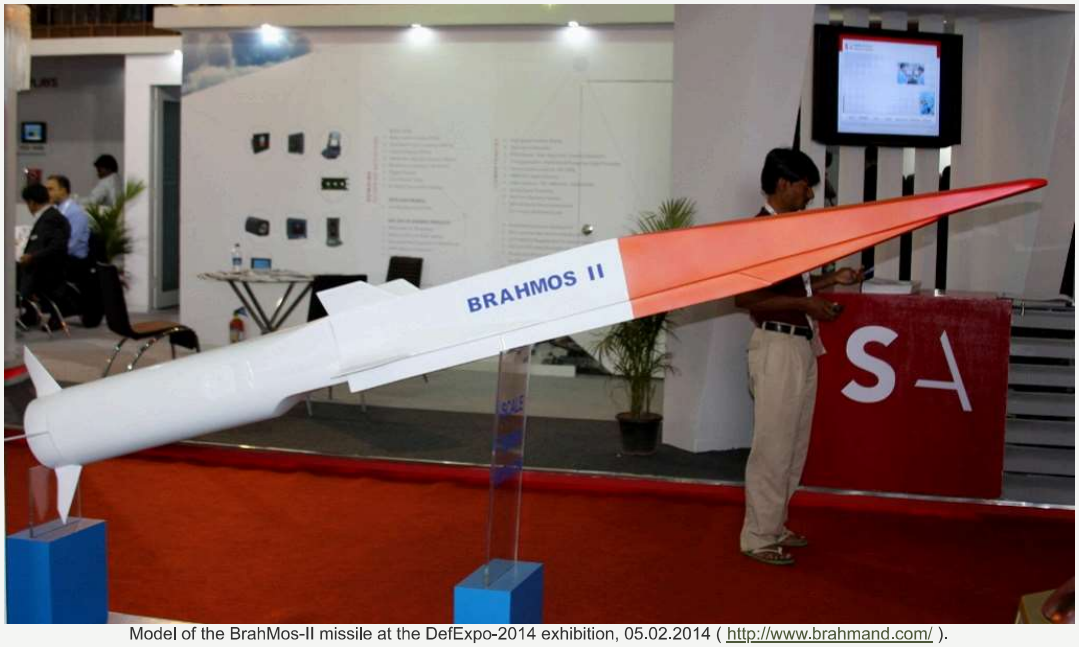
DATA AS OF 2015 (standard replenishment)
BrahMos-II / BrahMos-2 missile
★★★

Hypersonic missile project. The missile is being developed by NPO Mashinostroyenia (*source - Annual report, p. 15*) jointly with DRDO (India). On September 29, 2008, after a meeting of the Russian-Indian Commission on Military-Technical Cooperation, the head of the BrahMos joint venture, Dr. Shivathanu Pillai, said that a decision had been made at the meeting to jointly develop the BrahMos-II hypersonic missile with a flight speed of 5-7M. The missile was planned to be created within 5 years (in 2013). In 2009, DRDO planned to test the HSTDV hypersonic demonstrator vehicle, which was being developed jointly with IAI (Israel), TsAGI and TsIAM. The purpose of the tests was to test the combustion chamber of the hypersonic ramjet.

There is an assumption that the joint development is based on a system created primarily for the Russian Armed Forces at NPO Mashinostroyenia - a missile system with the Zircon anti-ship missile . The first statements about the development of the system in the media date back to 2010-2011. As of early 2013, it is believed that the identification of the BrahMos-II system as an analogue of the Zircon anti-ship missile is either a hoax or simply a mistake. As of 2011, the organization of serial production of the Zircon missile system (and possibly Brahmos-II) is planned for the coming years at PO Strela (Orenburg, *source - Annual report, p. 15*).

Before the opening of the Aero India 2013 aviation exhibition on February 5, 2013, a photo of the BrahMos-II missile model appeared for the first time. Later, on the opening day of the exhibition on February 6, more detailed photos of the missile model appeared.

The data are presumptive. Sources are given.



Model of the BrahMos-II missile at the DefExpo-2014 exhibition, 05.02.2014 (http://www.brahmand.com/).

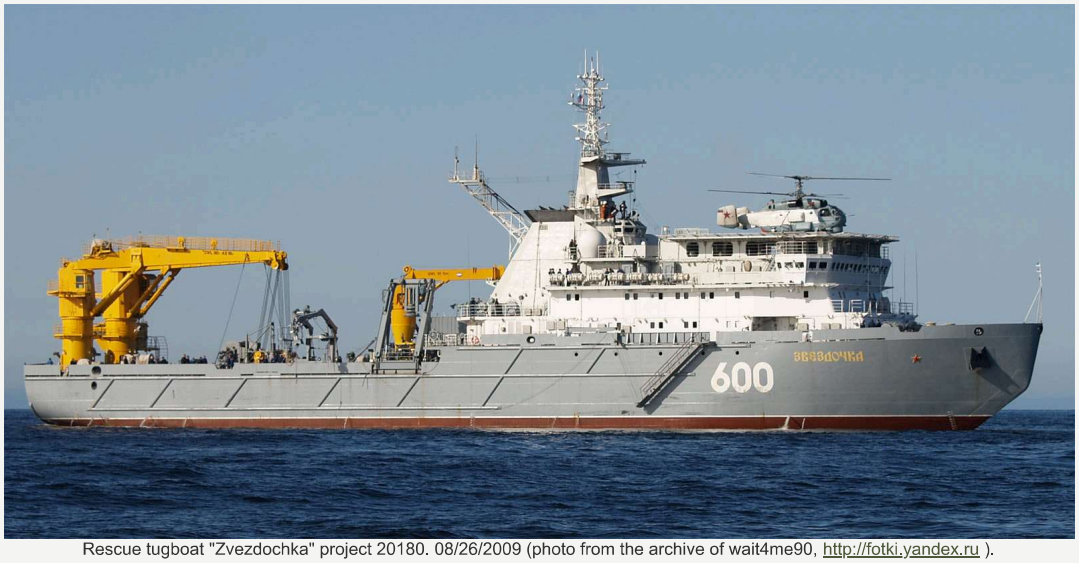
Author: DIMMI Created: 23.07.2012 17:20:49 Comments: 22 READ THE FULL ARTICLE

pr.20180 Star

DATA FOR 2015 (standard replenishment)
pr.20180
"Zvezdochka" **pr.20181 / 20180TV** "Akademik Kovalev" **pr.20183** "Akademik Aleksandrov" **pr.20183TV** "Akademik Makeev"

★★★★

Rescue tug (Project 20180) / sea weapons transport (Project 20180TV) / search and rescue ship / sea support vessel (Project 20183). The project was developed by Almaz Central Marine Design Bureau (St. Petersburg), Chief Designer - A.A. Forst (including Project 20180TV). It is planned to build a series of 5-6 ships. The lead ship "Zvezdochka" with factory number 01218 was laid down at the shipbuilding center / ship repair yard "Zvezdochka" on September 3, 2004, launched on December 20, 2007, the test sea exit to complete state trials took place after June 15, 2010. The ship was accepted into service with the Northern Fleet of the Russian Navy on July 24, 2010. Home port - Severodvinsk. The ship is participating in testing new equipment systems together with the submarine B-90 "Sarov" project 20120. The contract for the construction of the ship of project 20180TV was concluded by the Ministry of Defense of Russia on September 15, 2011. The sea transport of weapons of project 20180TV "Akademik Kovalev" was laid down at the CS "Zvezdochka" on December 20, 2011. After 2014, it is planned to build the third ship of the project. By default, the data of project 20180.



Rescue tugboat "Zvezdochka" project 20180. 08/26/2009 (photo from the archive of wait4me90, http://fotki.yandex.ru).

Author: DIMMI Created: 30.05.2011 10:44:58 Comments: 5 READ THE FULL ARTICLE

pr.11711 - IVAN GREN

DATA FOR 2015 (standard update)
Project 11711 - IVAN GREN
"Ivan Gren"
"Peter Morgunov"
★★★★

Large landing ship (LDK). The ship design was developed by the Nevskoye Design Bureau (Nevskoye PKB, St. Petersburg). The design of the ship was started according to the technical specifications of the Russian Navy in 1998. According to the original plan, it was supposed to create a ship of small displacement, capable of carrying out transitions by inland waterways. This requirement was removed by the Navy at the design stage and the ship moved to the class of large landing ships (LDK) with a displacement of over 5,000 tons with the ability to transport a reinforced company of marines with equipment, as well as with the basing of two Ka-29 landing and transport helicopters on the ship and giving it the ability to contactlessly land equipment on the shore through pontoons carried on the ship. The technical specifications for the design changed three times, the design was carried out for 6 years.

The lead ship of Project 11711 "Ivan Gren" was laid down at the Baltic Shipyard "Yantar" (Kaliningrad) on December 24, 2004. In total, five ships of the project were planned for the Russian Navy as of 2008. In early 2012, the construction of a ship of Project 11711 was named among the unfulfilled orders in 2011 under the State Defense Order. During the construction of the lead ship of the project, 22 changes were made to the project and the ship under construction at the request of the Navy (*source - Glukhov D...*).

In November 2012, a new contract is expected to be signed between USC and the Russian Ministry of Defense for the completion of the Ivan Gren large landing ship.

BDK "Ivan Gren" pr.11711 at the Yantar Shipyard, Kaliningrad, 05.24.2012 (photo by I.A. Mikhailov, http://forums.airbase.ru).

Author: DIMMI Created: 09.12.2011 04:36:02 Comments: 22 READ THE FULL ARTICLE

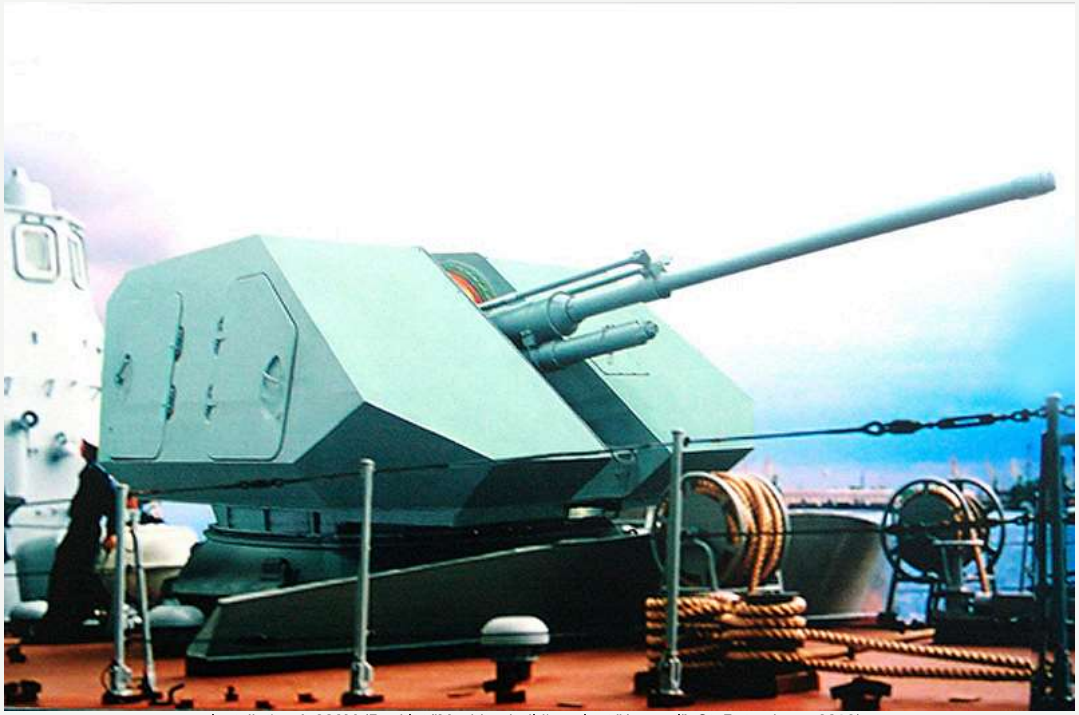
57 mm installation A-220 / A-220M

DATA AS OF 2015 (standard replenishment)
Installation A-220
Installation A-220M
★★★

1 x 57-mm universal artillery mount. The decision to develop it was made in 1967 and R & D work began in 1967 by the Gorky Machine-Building Plant Design Bureau and continued at the Burevestnik Central Research Institute (after it was formed in 1970 on the basis of the design bureau). The draft design was ready in August 1968. Field tests were conducted from August 26, 1975 to April 28, 1977, with breaks for modifications and corrections to the system. During the tests, the barrel survivability was recognized as insufficient. State shipboard tests were conducted from September 1977 to August 1978 together with the Vympel-220 fire control system on the Project 206PE experimental boat (factory No. 110). The test results were generally recognized as positive, but the mount was not accepted into service.

In 2000-2001, PO Arsenal mastered the production of a modernized version of the A-220M (the turret hull was changed). The A-220M is offered for export. As of 2015, the Central Research Institute Burevestnik reports that the A-220M tests have been completed and it is recommended for adoption into service.

The installation is designed to destroy air, sea and coastal targets. By default, the installation data is A-220.



Installation A-220M (Booklet "Machine-building plant "Arsenal". St. Petersburg, 2009).

Author: DIMMI Created: 14.03.2009 03:03:06 Comments: 1 READ THE FULL ARTICLE

Prospective destroyer / Research and development Lider / project 23560

DATA FOR 2015 (standard update)
Prospective destroyer / R&D "Lider"
pr.23560E
★★★

Project of a promising ocean-going destroyer. The project is being developed by the Severnoye Design Bureau (St. Petersburg, since at least 2012, source). The Severnoye Design Bureau has been developing variants of promising destroyers since the late 1980s under various project numbers and with changing tactical and technical requirements over the years. Scientific support for the project is likely to be provided by the Krylov Central Research Institute (St. Petersburg).

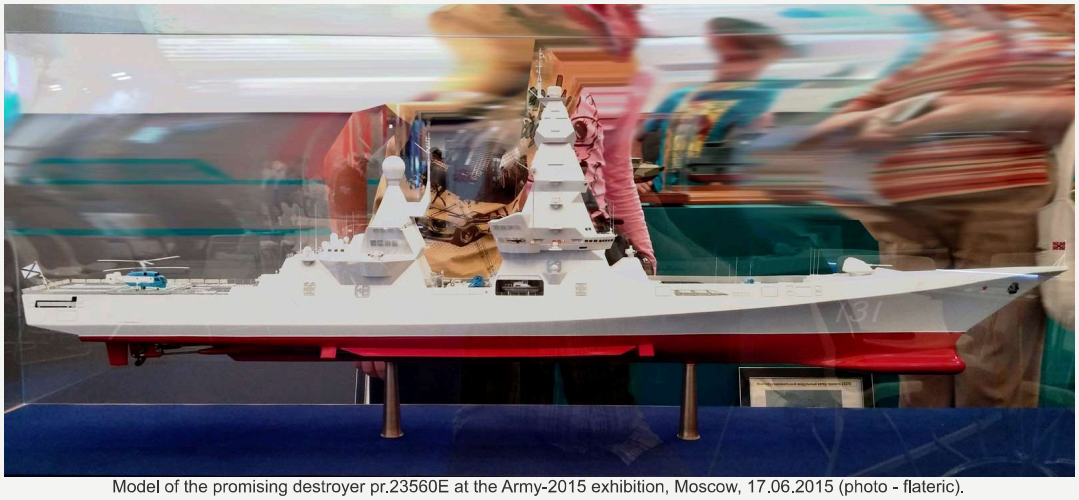
On June 19, 2009, ITAR-TASS reported that a competition to select a developer for a promising destroyer project for the Russian Navy is planned for the end of 2009, and on June 26 of the same year, the Commander-in-Chief of the Russian Navy V. Vysotsky announced that construction of destroyers of the new project would begin in 2012. On February 1, 2012, Navy Commander-in-Chief V. Vysotsky announced that the technical appearance of a destroyer of this class would be determined in 2012. On June 25, 2012, USC head Roman Trotsenko announced to the media that the design of a promising destroyer was already being conducted by Severnoye PKB (St. Petersburg), and that the ship would be equipped with elements of anti-missile and anti-space defense. According to the Severnoye PKB annual report for 2012, work on the Leader R&D project accounted for 5% of the company's total output.

On February 26, 2013, RIA Novosti published information that a competition for the Leader R&D project had been announced to develop a preliminary design for the creation of a new destroyer, funding for which was included in the State Defense Order for 2013. The R&D work is to be completed by the end of 2013. The Severnoye Design Bureau will most likely participate in the competition to create the preliminary design for the ship; the other participants in the competition are unknown. After the preliminary design competition results are summed up, R&D work is planned for 2014, and construction of the lead ship is currently planned to begin in 2016 (source). On September 11, 2013, and December 26, 2013, Commander-in-Chief of the Russian Navy Viktor Chirkov visited the Severnoye Design Bureau to review the progress of work on designing the destroyer.

In early 2015, development of the preliminary design for the destroyer is ongoing (source). On February 20, 2015, the Commander-in-Chief of the Navy announced that design work was underway on a destroyer with a nuclear power plant. In June 2015, a model of the promising destroyer named Project 23560E was demonstrated at the Army-2015 exhibition.

Our forecast (09/28/2013): with a high probability, the ship will be laid down as planned - in 2016, but actual construction will begin in 2017-2018 or even after 2020 - this is due to current trends in the financing of large projects in the construction of the Navy, as well as the unreadiness of many components of the equipment and weapons systems of the future ship.

On 06/22/2015, Navy Commander-in-Chief Viktor Chirkov told the media that construction of the Lider destroyers could begin in 2019.



Model of the promising destroyer pr.23560E at the Army-2015 exhibition, Moscow, 17.06.2015 (photo - flateric).

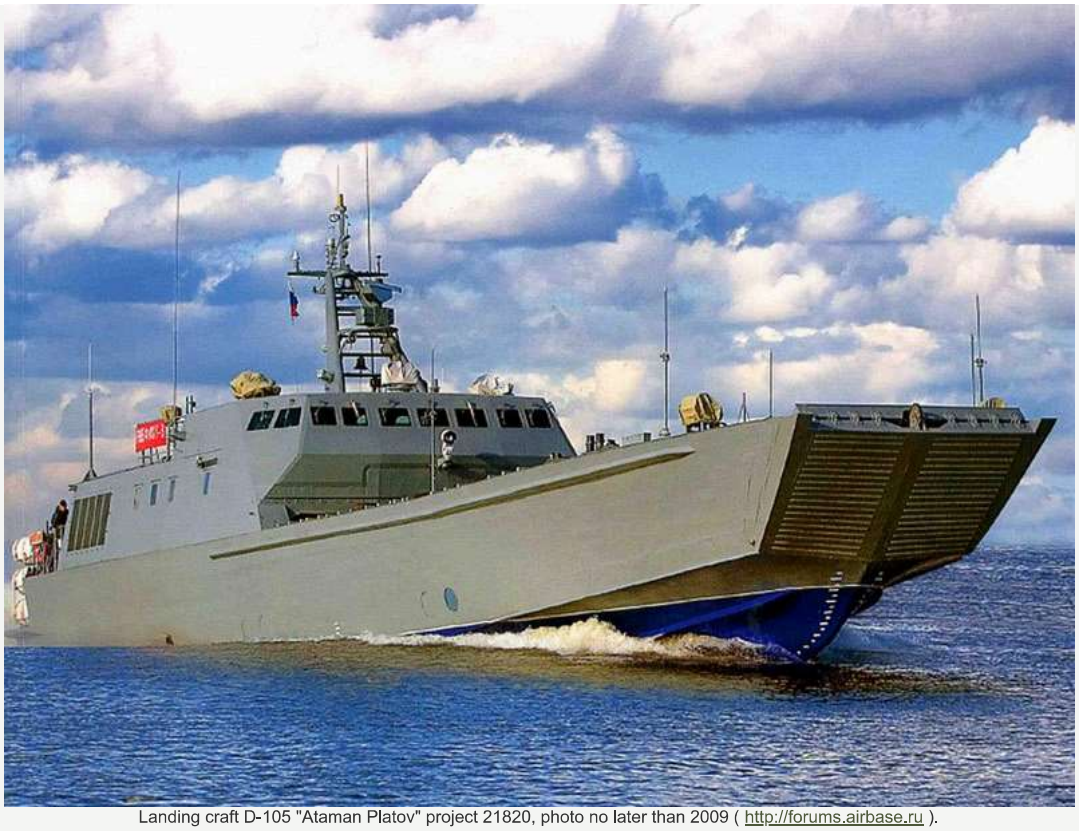
Author: DIMMI Created: 01.02.2012 22:46:21 Comments: 84 READ THE FULL ARTICLE

pr.21820 Dugong - DYUGON

DATA AS OF 2015 (standard replenishment)
project 21820 "Dyugong" - DYUGON
D-105 "Ataman Platov"
"Denis Davydov "
"Ivan Kartsov"
"Lieutenant Rimsky-Korsakov"
"Midshipman Lermontov"
★★★

Landing craft on an air cavity. The project was developed by the "Central Design Bureau for Hydrofoil Vessels named after R.E. Alekseev" (Nizhny Novgorod). In 1998, the Central Design Bureau for Hydrofoil Vessels developed a project for a large high-speed landing craft "Shelf". It was planned to complete the development of the boat and create the lead model by 2000. The lead boat of the D-105 project was laid down at the Volga Shipyard in Nizhny Novgorod on February 21, 2006, launched in July 2009 and accepted into the Caspian Flotilla of the Russian Navy in 2010.

On June 23, 2011, a contract was signed between the Russian Ministry of Defense and the Yaroslavl Shipyard for the production of a series of boats of Project 21820. The first serial boat "Denis Davydov" (plant no. 701) was laid down on January 18, 2012.



Landing craft D-105 "Ataman Platov" project 21820, photo no later than 2009 (http://forums.airbase.ru).

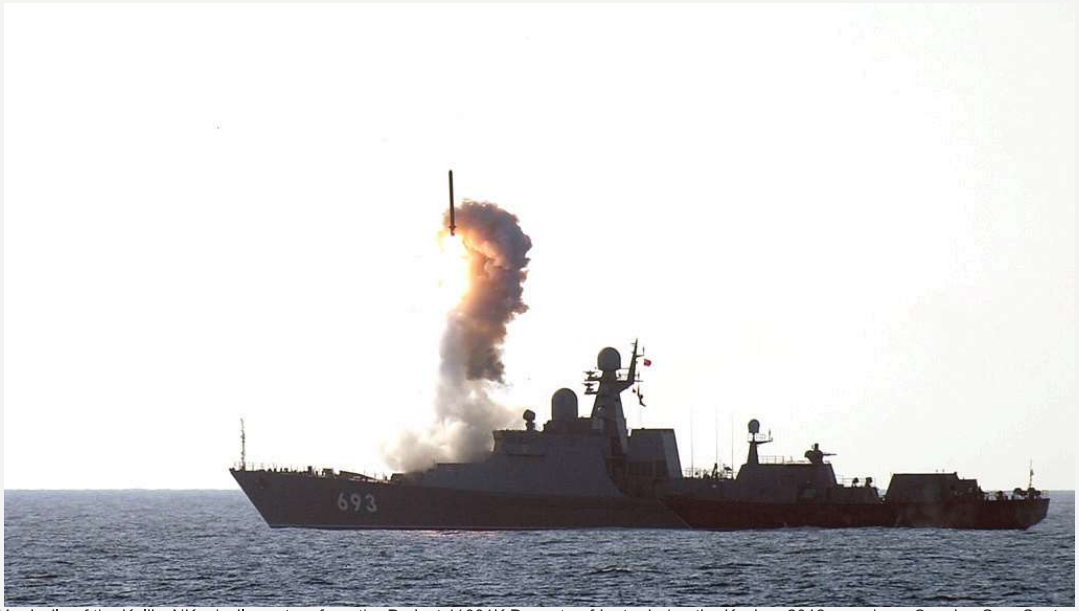
Author: DIMMI Created: 18.01.2012 19:28:36 Comments: 6 READ THE FULL ARTICLE

Project 11661 Cheetah - GEPARD

DATA AS OF 2015 (standard replenishment)
pr.11660 "Gepard" - GEPARD
pr.11661 / pr.11661K (first) "Gepard" - GEPARD
"Tatarstan"
pr.11661K (serial) - GEPARD
"Dagestan"
★★★★

pr.11661E "Gepard-3.9" - GEPARD
Dinh Tien Hoang (HQ-011) / plant no.954
Ly Thay To (HQ-012) / plant no.955
pr.11662
pr.11663

Patrol ship / corvette / missile ship. Development was started in 1982 by Zelenodolsk Design Bureau (Zelenodolsk), Chief Designer - M.M. Nesterenko, since 1986 - V.N. Kashkin. Development of the coastal zone anti-submarine ship was carried out as a development of the project MPC pr.1124M with the SLRK " Liven " since February 1982. Two versions of the tactical and technical specifications were developed and in 1983 two versions of the preliminary design were proposed - an anti-submarine ship with the SLRK " Liven " in the dimensions of the MPC pr.1124M and an anti-submarine ship with a displacement of up to 2000 tons with significantly higher efficiency. In April 1983, after the Navy requirements for the project changed, the second project received the number 11660 (export version - 11660E) and was reclassified as a guard ship. Analysis of the development of projects showed that the delivery of the export version of the cruiser could be planned for 1990, while the readiness for delivery of the version for the Soviet Navy in terms of weapons systems could not be earlier than 1992.



Launch of a 3M54 missile of the Kalibr-NK missile system from the Project 11661K Dagestan frigate during the Kavkaz-2012 exercises, Caspian Sea, September 2012 (photo from the Curious archive, http://forums.airbase.ru).

Author: DIMMI Created: 04.01.2011 14:37:42 Comments: 33 READ THE FULL ARTICLE

Installations SM-6 and SM-31

DATA FOR 2015 (needs updating)
Installation SM-6
Installation SM-31

Artillery mounts of unbuilt post-war ships - cruisers of Project 66 and Project 82 "Stalingrad". Developed by TsKB-34 (Leningrad). By order of the USSR Minister of Armaments D.F. Ustinov No. 51 of 28.01.1950, the directors of plants No. 221, 710 and TsNII-173 were ordered to accept for management and implementation that the USSR Council of Ministers obliged the Minister of Armaments to ensure the preparation and launch of the 3-gun artillery turret SM-31 in 1950, ensuring its delivery for the lead ship in the 1st quarter of 1951.

Author: DIMMI Created: 11.02.2009 22:02:19 Comments: 4 READ THE FULL ARTICLE

pr.1914 Zodiac - MARSHAL NEDELIN

DATA AS OF 2015 (in progress, standard replenishment)
pr.1914 "Zodiac" / pr.19141 / pr.19142 - MARSHAL NEDELIN
"Marshal Nedelin"
"Marshal Krylov"
"Marshal Biryuzov"

Measuring complex ship / measuring and search ship (laying board) / large search and measurement ship (according to preliminary design). The project was developed by the Central Design Bureau "Baltsudoproekt" (Leningrad) by order of the Main Directorate of Space Facilities (GUKOS). The chief designer of the project is Dmitry Georgievich Sokolov.

The first two sections of the lead ship of Project 1914 were assembled at the Baltic Shipyard in accordance with the Resolution of the Central Committee of the CPSU and the USSR Council of Ministers No. 577-195 of 16.07.1974 and the Order of the USSR Ministry of Defense No. 00493 of 19.08.1974. Later, by the Resolution of the Central Committee of the CPSU and the USSR Council of Ministers No. 744-244 of 24.08.1977 and the Order of the USSR Ministry of Defense No. 00489 of 13.09.1977, the construction of the ship was transferred to the Leningrad Admiralty Association, where the lead ship was officially laid down on 19.11.1977, launched on 30.10.1981 and handed over to the Fleet on 30.12.1983. The third ship of the project was not laid down, and the stock was dismantled on the slipway. The lead ship "Marshal Nedelin" was withdrawn from the fleet in 1998 and dismantled for metal.

The ships of the measuring complex were used in the interests of the Strategic Missile Forces during ICBM tests at points in the Pacific Ocean, as well as for tracking space objects.

The measuring complex ship of project 19141 "Marshal Krylov" off the coast of Kamchatka, 2000s (Admiralteets No. 3 / 2015).

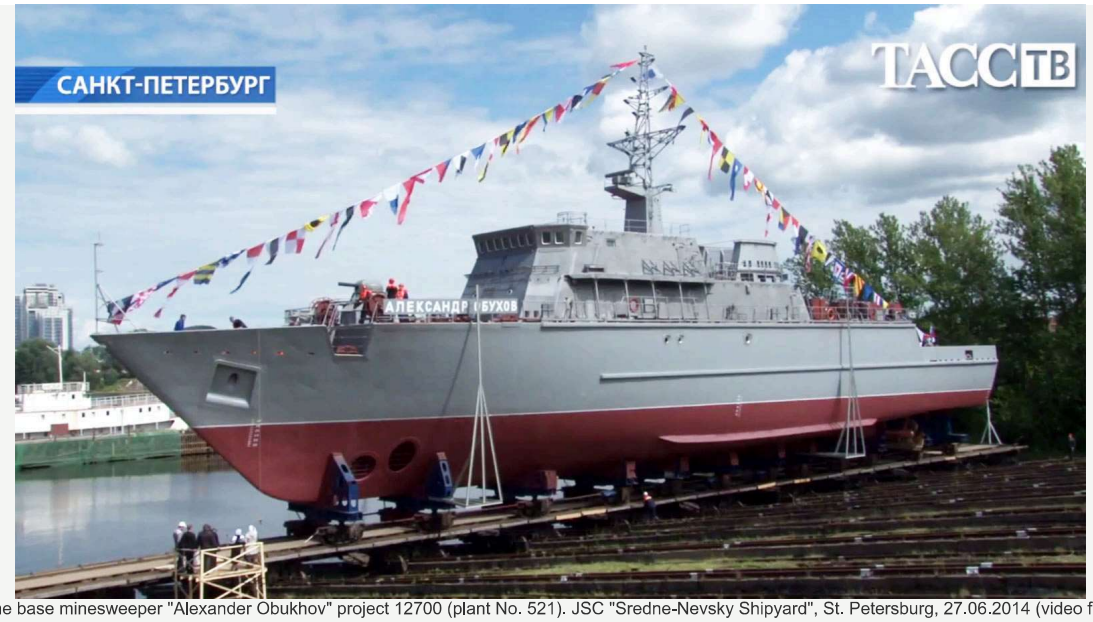
Author: DIMMI Created: 07.03.2015 14:54:44 Comments: 4 READ THE FULL ARTICLE

Project 12700 Alexandrite

DATA FOR 2015 (standard update)
pr.12700 "Alexandrite"
BT-730 "Alexander Obukhov"

Basic minesweeper. The project development was started in 2002 by the Almaz Central Marine Design Bureau (St. Petersburg), chief designer - O.K. Korobkov. It is intended to protect the waters of naval bases. The lead ship, factory No. 521, was laid down at the Sredne-Nevsky Shipyard on September 22, 2011. The ship was planned to be launched in 2012, but in the end it took place only on June 27, 2014.

The ship was planned to be commissioned in 2013. As of January 2014, according to media reports , the ship's trials and delivery to the Fleet will take place in 2015. On February 18, 2015, it was reported that the minesweeper began mooring trials.



Launching of the base minesweeper "Alexander Obukhov" project 12700 (plant No. 521). JSC "Sredne-Nevsky Shipyard", St. Petersburg, 27.06.2014 (video frame, http://itar-tass.com).

Author: DIMMI Created: 18.01.2014 23:32:35 Comments: 8 READ THE FULL ARTICLE

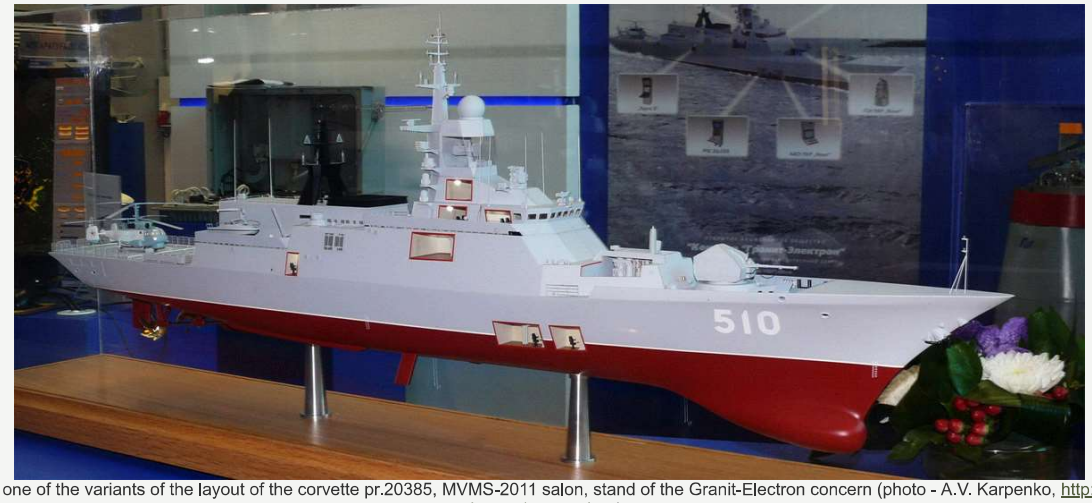
pr.20385 - GREMYASHCHY

DATA FOR 2015 (standard update)
pr.20385 - GREMYASHCHY
"Gremyashchiy"
"Provorny"
★★★

Second-rank patrol ship of the near sea zone (SKR) / corvette. The ship design was developed on the basis of the Project 20380 patrol ship designed by the Almaz Central Marine Design Bureau (St. Petersburg). The chief designer of the project is Igor Nikolaevich Ivanov.

Contract for the construction of the lead ship No. 253/05/2/K/0546-06 was signed by the Russian Ministry of Defense on March 27, 2006 (for the delivery of the corvette Project 20385, hull No. 1005). The lead ship of the project, 1005 Gremyashchiy, was laid down at the Severnaya Verf Shipyard (St. Petersburg) on 01.02.2012, and is scheduled to be launched in 2014. The first serial corvette, Provornyy, was laid down on 25.07.2013. In March 2011, it was reported that a contract had been signed for the construction of 9-11 ships of the project. In total (as of July 2013), it is planned to build 10 corvettes of the project by 2020.

In some Western sources, it is considered a separate type of ship (**GREMYASHCHY class**).



Model of one of the variants of the layout of the corvette pr.20385, MVMS-2011 salon, stand of the Granit-Electron concern (photo - A.V. Karpenko, http://bastion-karpenko.narod.ru).

Author: DIMMI Created: 25.07.2013 23:47:15 Comments: 5 READ THE FULL ARTICLE

RPK-5 Liven RBU-10000

DATA AS OF 2015 (standard replenishment)
RPK-5 "Liven" K89R, RBU-10000 / KT-129 installation, 89P missile
★★★★

Anti-submarine missile system. Number of launcher guides - 6. RPK "Liven" was developed by the Moscow Institute of Thermal Engineering, chief designer N.P. Mazurov (the group of developers was awarded the USSR State Prize for its creation) by decision of the Military-Industrial Complex under the USSR Council of Ministers of July 2, 1969 and by decision of the Military-Industrial Complex under the USSR Council of Ministers No. 241 of September 12, 1972. The system is designed to destroy submarines and torpedoes. The draft design of the complex was accepted in the 3rd quarter of 1971. Throw tests of missiles with mock-ups of RPK gravity projectiles against the Project 690 submarine target were conducted from April 23 to June 9, 1975. Missile launches against the Project 690 submarine target were also carried out during the Black Sea Fleet command and tactical exercises in 1980. Tests of the complex were conducted from the experimental small anti-submarine ship MPK-5 of Project 1124A (factory No. 702).

In 1982, the complex was accepted into service. Serial production of the complex's rockets was carried out by the Petropavlovsk Heavy Machine Building Plant (Petropavlovsk, source). It was supposed to arm the Project 11540 Yastreb cruiser with the complex and other ships, but the development of the complex was discontinued.

Launch of the 89R missile of the RPK-5 Liven complex (RPK-5 Liven anti-submarine missile complex (K89R). // Army and Navy Review, No. 1 / 2007)

Author: DIMMI Created: 02/14/2009 01:36:40 Comments: 11 READ THE FULL ARTICLE

Bomb launcher BMB-1 / BMB-2

BMB-1
BMB-2

Rodless depth charge launcher (GB). Developed in the SKB MV under the supervision of B.I. Shavyrin. Adopted into service in 1948 (BMB-1). BMB-2 replaced it in 1951.

A BMB-2, SKR-50 mortar launcher fires, 1960 (photo from preodol archive, http://forums.airbase.ru).

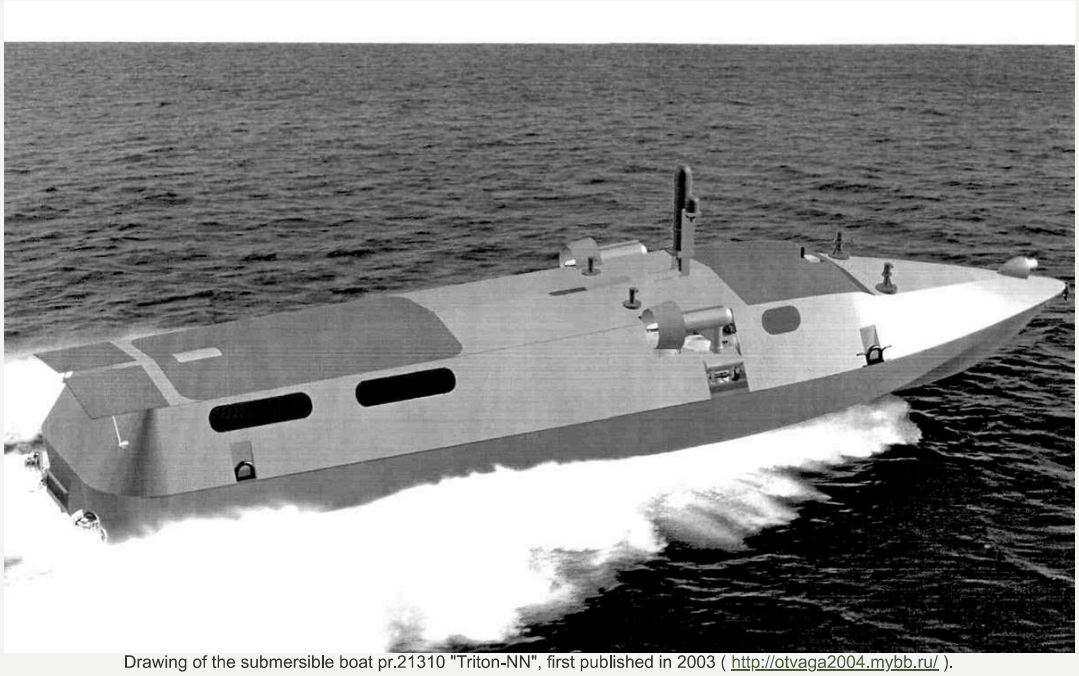
Author: DIMMI Created: 14.02.2009 01:52:14 Comments: 4 READ THE FULL ARTICLE

pr.21310 Triton-NN

DATA FOR 2014 (standard update)
Project 21310 "Triton-NN"
★★★

Submersible boat - carrier of divers. Developed by the Central Design Bureau "Lazurit" in 2001-2002, observers from the Russian Navy - Grebenchuk V.M., Kharitonov V.V., Ovchinnikov A.V., Berkov Yu.A. The development was carried out within the framework of the R&D "Triton-NN" and "Furnitura" (the second is possibly an independent product). Testing of the boat was planned for November 2008 in Parusnoye (source , source). As a result, in December 2008, state tests of the prototype submersible boat were conducted. According to the "Annual Report of the Central Design Bureau "Lazurit" for 2008, the project was prepared for serial production during the year.

The boat is capable of gliding on water, as well as moving underwater, and is intended primarily for carrying out sabotage operations with covert landing on the enemy shore (source).



Drawing of the submersible boat pr.21310 "Triton-NN", first published in 2003 (http://otvaga2004.mybb.ru/).

Author: DIMMI Created: 11/15/2014 6:37:06 PM Comments: 1 READ THE FULL ARTICLE

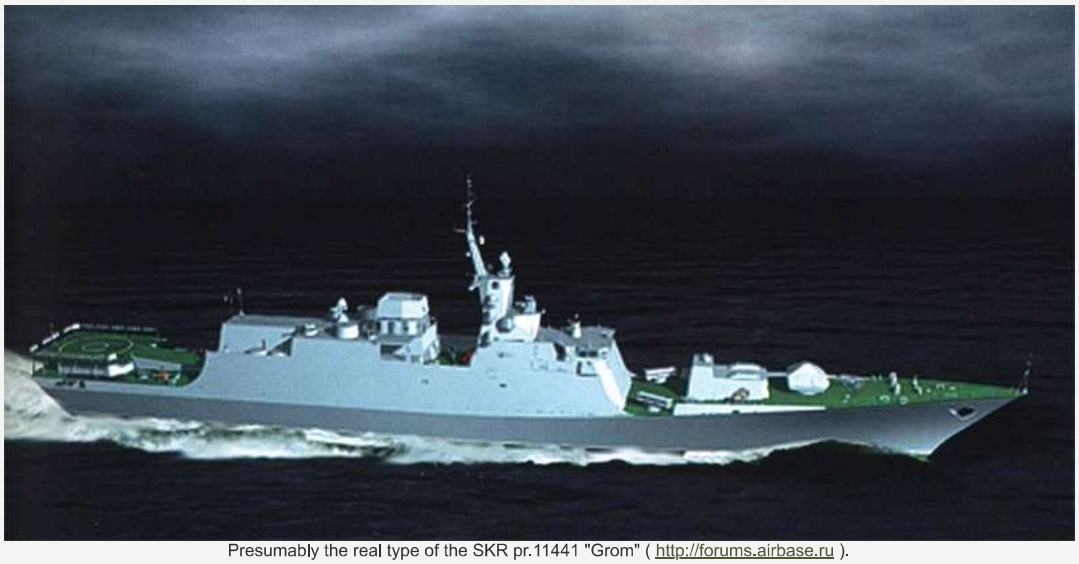
pr.12441 Grom / Novik - NOVIK

DATA AS OF 2014 (standard replenishment)
pr.12440 / pr.12441 "Thunder" - NOVIK
"Novik"
pr.12441U
"Borodino"
★★★

Patrol ship. Development began in 1982 by the Almaz Design Bureau (St. Petersburg), chief designer - L.V. El'skiy, later - V. Borisov. The Project 12440 Grom coastal zone frigate with expanded strike capabilities was created in competition with the Project 11660 Gepard frigate by the Zelenodolsk Design Bureau. According to the original concept, the Project 12440 frigate was a development of the Project 11660 frigate, which was being developed for export for the Indian Navy. The technical design of Project 12440 was approved in 1991. In 1994, the design was revised and it was finally accepted for construction as Project 12441 Grom.

The lead ship of the Novik project (factory No. 1900, entered into the fleet lists on 16.07.1997) was laid down on 26.07.1997 at the Yantar Shipyard (Kaliningrad). Two more ships of the project were planned for construction - Rurik and Peresvet - but they were not laid down. The delivery of the lead ship to the fleet was planned for the beginning of the 21st century, but by the end of the 1990s, due to a change in the approaches of the Navy leadership to issues of fleet construction, construction was stopped. The ship's readiness in 2000 was estimated at no more than 20%.

In 2001, work began on the possibility of completing the ship according to a modified project with delivery to the fleet in 2008. In 2007, a decision was made to complete the ship according to Project 12441U as a training ship under the name Borodino. Apparently, work on the ship has not yet begun, or is being carried out using the latest, less noticeable technologies.



Presumably the real type of the SKR pr.11441 "Grom" (http://forums.airbase.ru).

Author: DIMMI Created: 17.01.2009 00:38:00 Comments: 15 READ THE FULL ARTICLE

100mm installation A-190

DATA FOR 2014 (standard update)

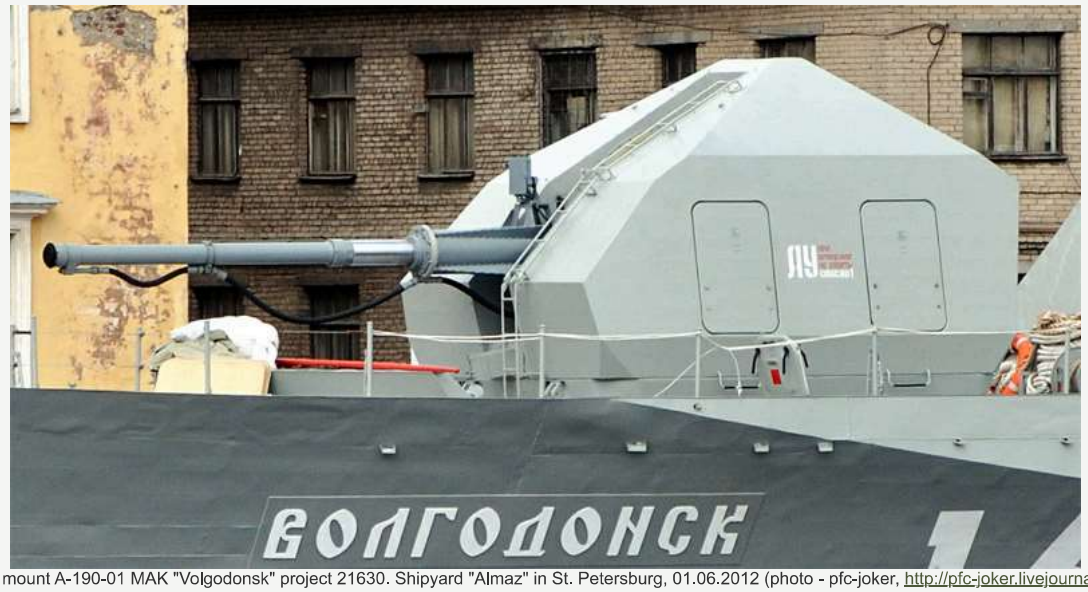
Complex A-190-5P-10 "Universal-Puma", installation A-190-01 "Universal"
Complex A-190E-5P-10E "Universal-Puma", installation A-190E
Installation A-190M

★★★★

1 x 100 mm lightweight universal artillery system / mount. R & D was conducted by the Design Bureau of the Arsenal Production Association (mount) and the Burevestnik Central Research Institute (loading system mechanics) since 1986. In 1996, the development of the FCS based on the AK-176-MR-123-02 system was completed at the Ametist Design Bureau. In 2000-2001, the technological preparation and launch of the system into production were carried out at the Arsenal Production Association. The system and the mount are intended for installation on small-tonnage ships. The mount is available in two turret versions: the A-190E (classic "ogive" type turret) and the A-190-01 / A-190M (stealth type turret). The production of mounts and guns for them is carried out at PO Arsenal (2010-2011) and since 2011 at OAO Motovilikha Plants (A-190-01KCh). The export version of the mount is A-190E.

There is also a hypothetical version of the creation of the A-190 mount - in the late 1960s, the development of the universal 100 mm mount A-190 was started by the Design Bureau of the Gorky Machine-Building Plant simultaneously with the 57- and 76-mm mounts (A-220 and A-221/ AK-176). After the formation of the Central Research Institute Burevestnik on the basis of the Design Bureau in 1970, the development was continued there, but until the second half of the 1980s it was not in demand by customers. Later, the Design Bureau of the Arsenal Production Association combined the developments of the Burevestnik Central Research Institute for the pendulum loading system and the gun part of the AK-100 mount in the A-190 mount . (source - Fear has passed).

Special thanks to ABL22 (http://militaryrussia.ru/forum/) for the materials and photographs provided.



Artillery mount A-190-01 MAK "Volgodonsk" project 21630. Shipyard "Almaz" in St. Petersburg, 01.06.2012 (photo - pfc-joker, http://pfc-joker.livejournal.com).

Author: DIMMI Created: 22.01.2009 22:51:07 Comments: 39 READ THE FULL ARTICLE